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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,784	06/27/2001	Frank Bahren	Westphal.6311	9616
7590	09/30/2004		EXAMINER	
Samuels, Gauthier & Stevens LLP 225 Franklin Street, Suite 3300 Boston, MA 02110			CHANKONG, DOHM	
			ART UNIT	PAPER NUMBER
			2152	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,784

Applicant(s)

BAHREN ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7, 10/15/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

- 1> Claims 1-10 were cancelled and claims 11-30 were added by Applicant in a preliminary amendment dated 10.27.2001. Claims 11-30 are now presented for examination.

Claim Rejections - 35 USC § 112

- 2> The following is a quotation of the second paragraph of 35 U.S.C. 112:
- a. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3> Claims 13, 15, 20 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a. Claims 13, 15 and 20 recite the limitation "the host network standard". There is an insufficient antecedent basis for this limitation in these claims.
 - b. Claim 27 is rejected as being a duplicate of claim 18, and therefore does not further limit or define over the claimed invention.

Claim Rejections - 35 USC § 103

- 4> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5> Claims 11-14 are rejected under Livermore et al, U.S Patent No. 6,542,511 ["Livermore"] in view of Flanders et al, U.S Patent No. 6,172,980 ["Flanders"].

6> As to claim 11, Livermore discloses a data telegram for transmitting data in a network that specifies a first data transmission protocol, the data telegram comprising:

a data section containing data formatted in accordance with an extraneous standard [column 6 <lines 27-29 and 47-51>].

Livermore does disclose the use of a header section having a predetermined region that contains information [Figure 7 <item 34> | column 6 <lines 43-47>], but does not explicitly state that the information specifies that the data section is formatted according to the extraneous standard.

7> Flanders discloses a frame header that specifies that the data section is formatted according to an extraneous standard [Figures 3A-3D | column 6 <line 26-30>]. It would have been obvious to one of ordinary skill in the art to have implemented the protocol identifier in Livermore's header to identify the data that is stored in the payload area of the frame to insure faster processing of the payload by each node. Livermore also suggests further functionality can be added to his header [column 6 <lines 34-35>].

8> As to claim 12, Livermore discloses the data telegram of claim 11, wherein the information is contained in a place in the header section that is otherwise unoccupied [Figure 7 <items 34,36> | column 6 <lines 27-31>].

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9> As to claim 13, Livermore discloses the data telegram of claim 11, wherein the information is contained in a place in the header section is reserved for information that is not relevant to the host network standard [column 6 <lines 27-31>].

10> As to claim 14, Livermore discloses the data telegram of claim 12, wherein the data telegram is divided into frames, the frames into blocks, and the blocks into bytes [column 6 <lines 16-26> where: Livermore's container is equivalent to the claimed 'block'].

11> Claims 15-20 are rejected under 35 U.S.C § 103(a) as being unpatentable over Livermore and Flanders in view of the MOST Specification Framework Rev. 1.1 ["MOST spec"].

12> As to claim 15, Livermore does not specifically disclose a data telegram wherein the first data transmission protocol is MOST and the host network standard is the MSOT standard, and wherein the header section comprises five bytes with the information contained in the last byte of the header section.

13> The MOST spec discloses a data telegram wherein the first data transmission protocol is MOST and the host network standard is the MOST standard [section 2.1 | section 3 | section 6 ("MOST Frame Structure")]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the MOST protocol and standard in Livermore's network to obtain MOST's advantages of increasing the speed of the network and decreasing cost of technology in automotive environments. Livermore suggests

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this implementation as his network is fully compatible with current and future optical (fiber) networks [Figure 3 | column 3 <lines 64-67>].

14> Flanders discloses that a header section of a frame can comprise of five bytes with the information contained in the last byte of the header section [column 5 <lines 40-45> where: the SNAP header consists of 5 bytes, and the protocol type field is equivalent to the claimed information]. It would have been obvious to one of ordinary skill in the art to implement the five byte header into Livermore's frame to help identify the protocol of the data that is contained in the payload of the frame.

15> As to claim 16, Livermore does not explicitly disclose a data telegram wherein the network is a MOST network in which data are transmitted by means of MOST telegrams having a header section of five bytes, wherein the information is contained in a telegram identification portion in the last byte of the header section.

16> The MOST spec discloses a data telegram wherein the network is a MOST network in which data are transmitted by means of MOST telegrams having a header [section 2.1 | section 4 | section 6 ("MOST Frame Structure")]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the Livermore's ring network and frames as a MOST network and MOST telegrams respectively, to obtain MOST's advantages and functionality of increasing the speed of the network and decreasing cost of technology in automotive environments.

17> Flanders discloses that a header section of a frame can comprise of five bytes with the information contained in a telegram identification portion in the last byte [column 5 <lines 40-45> where: SNAP header and TYPE field]. It would have been obvious to one of ordinary skill in the art to implement the five byte header into Livermore's frame to help identify the protocol of the data that is contained in the payload of the frame.

18> As to claim 17, Livermore discloses that his network is suited for transporting data of extraneous standards [column 6 <lines 47-51>], but does not explicitly disclose that the extraneous standard corresponds to the Transmission Control Protocol (TCP) standard.

19> Flanders teaches a data telegram wherein the extraneous standard is TCP [column 7 <lines 12-14>]. It would have been obvious to one of ordinary skill in the art to implement TCP as the extraneous standard for Livermore's data telegram, as TCP is a ubiquitous standard in the network arts.

20> As to claim 18, Livermore discloses the data telegram of claim 17, wherein the extraneous standard corresponds to the Internet Protocol (IP) standard [column 6 <lines 47-51>].

21> As to claim 19, Livermore discloses that his network is suited for transporting data of

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extraneous standards and especially packets [column 6 <lines 47-51>], but does not explicitly disclose that the extraneous standard corresponds to the Internet Packet Exchange protocol (IPX) standard.

22> Flanders teaches a data telegram wherein the extraneous standard is IPX [column 6 <lines 8-11>]. It would have been obvious to one of ordinary skill in the art to implement IPX as the extraneous standard for Livermore's data telegram, as IPX is a ubiquitous standard in the network arts.

23> As to claim 20, Livermore discloses the data telegram of claim 19, wherein the header section of the data telegram is formatted in accordance with the host network standard [column 6 <lines 29-31>].

24> Claims 21-30 are rejected under 35 U.S.C § 103(a) as being unpatentable over the MOST spec, in view of Flanders et al, U.S Patent No. 6,172,980 ["Flanders"].

25> As to claim 21, the MOST spec discloses a data telegram for transmitting data in accordance with a MOST protocol in a MOST network, the data telegram comprising:

a data section containing data formatted in accordance with a prescribable extraneous standard [sections 5, 6.7, 6.8.(1-4)].

The MOST spec also discloses a header section with a predetermined region of which contains information specifying that the data section is formatted according to the

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extraneous standard [section 5, page 31], but does not explicitly state that the header consists of 5 bytes.

26> Flanders teaches a frame header of five bytes [column 5 <lines 37-45>]. It would have been obvious to one of ordinary skill in the art to implement the MOST spec's header as a five byte header as taught by Flanders to allow the network devices to properly identify the protocol type of the data contained in the payload.

27> As to claim 22, the MOST spec discloses the data telegram of claim 21, wherein the predetermined region in the header section that is otherwise unoccupied in accordance with the MOST protocol [section 5 - page 31 where: the coding field is the predetermined region, and since the field is specifically for indicating the kind of data, it is otherwise unoccupied by any other information besides the coding information].

28> As to claim 23, the MOST spec discloses the data telegram of claim 21, wherein the predetermined region in the header section is reserved for information that is not relevant to the MOST protocol [section 5 - page 31 where: the coding field contains information only about the protocol of the data being carried in the payload].

29> As to claim 24, the MOST spec discloses the data telegram of claim 21, wherein the information is contained in the header section [section 5 - page 31], but does not explicitly state that the it is contained in the last byte of the header section.

30> Flanders discloses a frame header that stores information of the kind of data in the last byte of the header section [column 5 <line 45>]. It would have been obvious to one of ordinary skill in the art to implement Flanders' header into the MOST header to obtain the advantage of having a fixed location for the protocol identifier in the header; this way, the network devices can quickly locate the protocol type of the data.

31> As to claim 25, the MOST spec discloses the data telegram of claim 21, wherein the extraneous standard is a Transmission Control Protocol (TCP) standard [section 2.5 – see “MOST ‘Open’ Model” figure].

32> As to claim 26, the MOST spec discloses the data telegram of claim 21, wherein the extraneous standard is a Internet Protocol (IP) standard [section 2.5 – see “MOST ‘Open’ Model” figure].

33> As to claim 27, the MOST spec discloses compatibility with a number of extraneous standards, including IP (see paragraph 32), but does not explicitly state that the extraneous standard is an Internet Packet Exchange (IPX) protocol standard.

34> Flanders discloses IPX as an extraneous standard for a data telegram [column 6 <lines 8-11>] where IPX and IP are compared to each other as routing protocols. Therefore, it would have been obvious to one of ordinary skill in the art to have implemented IPX as an

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extraneous standard into the MOST spec as well in addition to IP, as they are both routing protocols, and would have obtained the further advantage of being compatible with IPX.

35> As to claim 28, the MOST spec discloses a MOST multimedia system comprising:
a plurality of multimedia devices communicably coupled through a communication path and defining a MOST network, wherein the multimedia devices transmit and receive data telegrams formatted in accordance with a MOST standard [sections 2.1 and 2.4],

wherein the data telegram comprises:

a data section containing data formatted in accordance with a prescribable extraneous standard [sections 5, 6.7, 6.8.(1-4)].

The MOST spec also discloses a header section with a predetermined region of which contains information specifying that the data section is formatted according to the extraneous standard [section 5, page 31], but does not explicitly state that the header consists of 5 bytes.

36> Flanders teaches a frame header of five bytes [column 5 <lines 37-45>]. It would have been obvious to one of ordinary skill in the art to implement the MOST spec's header as a five byte header as taught by Flanders to allow the network devices to properly identify the protocol type of the data contained in the payload.

37> As to claims 29 and 30, they do not teach or further define over the limitations recited

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in claims 24-27. Therefore, claims 29 and 30 are also rejected for the same reasons set forth in claims 24-27, supra.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent No. 6,028,933 to Heer et al [for multiple protocol transmissions over a hybrid fiber/coax network - abstract];

U.S. Patent No. 6,463,477 to Fontenot [for multiprotocol (including TCP, IP, IPX encapsulation in a data packet - abstract];

U.S. Patent no. 6,603,768 to Bleszynski et al [for multiple protocol conversions with the use of header information - Figure 5];

U.S. Patent Publication No. US 2001/0025376 A1 to Knobl [Abstract | 0009].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864.

The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC

 JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100